

Index, 1983

A

- Achromobacter*, 4-6:35
 Actor, Ann T.--see Loughlin et al.
 Aerobic plate count (APC), blue crab, 7-9:39
 Agnello, Richard J., "Economic potential for utilizing minced fish in cooked sausage products," 7-9:21
 Alaska Regional Office, NMFS, 7-9:48
 Albacore, *Thunnus alalunga*, 4-6:31, 7-9:57
 Amberjack, *Seriola dumerilli*, 1:15
 American Fisheries Promotion Act of 1980, 7-9:21
 American oyster, *Crassostrea virginica*, 3:1
 biotic potential, 3:14
 harvest methods, 3:1
 industry, economic trends, 3:1, 3
 production costs, reducing, 3:20
 production, increasing, 3:13, 21
 seed, 3:1
 areas of production, 3:6
 factors in decline, 3:6
 from hatcheries, 3:19
 gathering methods, 3:6
 improved genetic strains, 3:20
 management strategy, 3:14
 production, 3:6
 survival, 3:19
 seed beds, 3:1
 condition by estuary, 3:8
 fouling organisms, 3:5
 ideal condition, 3:7
 rehabilitation, 3:6, 15
 scuba surveys, 1970-75, 3:7
 substrate, 3:7
 yield, northeast U.S., 3:1
Ammodytes spp., sand lance, 10-12:19
 Anchovy, *Stolephorus devisi*, 10-12:50
 Anchovy, *Stolephorus heteroleobus*, 10-12:50
Anoplopoma fimbria, sablefish, 10-12:16
 API 20 E Enterobacteriaceae system, 4-6:36, 37
Asterias forbesi, starfish, 3:5
 Atlantic bonito, *Sarda sarda*, 1:16
 Atlantic cod, *Gadus morhua*, 1:1, 5-6; 7-9:21, 34; 10-12:4, 18
 Atlantic croaker, *Micropogonias undulatus*, 1:15; 10-12:4, 19
 Atlantic herring, *Clupea harengus*, 10-12:18
 Atlantic mackerel, *Scomber scombrus*, 10-12:4, 18
 Atlantic menhaden, *Brevoortia tyrannus*, 10-12:4, 7, 19
Atractoscion nobilis, white seabass, 4-6:27
Auxis rochei, bullet mackerel, 4-6:27

B

- Bacillus*, 4-6:35
 Bacteria, histamine producing, 4-6:35-38
 Bacterial spoilage, tuna, 4-6:35
 Baitfish, 10-12:50
Balanus eburneus, barnacle, 3:5
Ballistes polylepis, finescale triggerfish, 4-6:27
 Barnacles, 3:5
 Bay anemone, *Diadumene leucolea*, 3:5
 Beaufort Laboratory, SEFC, 10-12:7
 Bigeye tuna, *Thunnus obesus*, 10-12:55
 Billfish (Istiophoridae), 1:16
 Biological Investigations of Marine Antarctic Systems and Stocks (BIOMASS), 10-12:23
 Blue crab, *Callinectes sapidus*, 3:5, 7-9:38
 handling, 7-9:38
 meat yield, 7-9:42-43
 microbiological properties, 7-9:38
 processing technologies, 7-9:38
 bacteriological profiles, 7-9:40-42
 debacked, eviscerated, boiled, 7-9:39
 energy savings, 7-9:43
 heat penetration, 7-9:39-41
 moisture content, 7-9:42
 whole-boiled, 7-9:39
 whole-boiled, debacked, washed, 7-9:39
 production, 7-9:38
 Bluefin tuna, *Thunnus thynnus*, 4-6:27, 10-12:4
 Bluefish, *Pomatomus saltatrix*, 1:16, 10-12:19
 Blum, F.--see Low et al.
 "Botulism and heat-processed seafoods," by Joseph J. Licciardello, 2:1
 Botulism, 2:1 (see *Clostridium botulinum*)
Brevoortia tyrannus, Atlantic menhaden, 10-12:4
 Brooker, James R.--see Martin et al.
 Brown shrimp, *Penaeus subtilis*, 4-6:1

- Brown, John W., John W. Manzi, Harry Q. M. Clawson, and Fred S. Stevens, "Moving out the learning curve: An analysis of hard clam, *Mercenaria mercenaria*, nursery operations in South Carolina," 4-6:10
 Brown, Thomas--see Hale and Brown
 Bryozoa, *Schizoporella unicornis*, 3:5
 Bucy, Michele--see Mercer and Bucy
 Bullet mackerel, *Auxis rochei*, 4-6:27

C

- CalCOFI--see Large Marine Ecosystems
Callinectes sapidus, blue crab, 3:5, 7-9:38
Callorhynchus ursinus, northern fur seal, 7-9:45, 57
Cancer irroratus, 3:5
 Canned foods, commercial
 inherent botulism protection, 2:2
 process time determination, 2:4
 determining Z value, 2:4
 phantom TDT curve, 2:4, 5
 safe commercial process, 2:2
 thermal death time (TDT) curve, 2:2-6
Caranx caballus, green jack, 4-6:27
 Charleston Laboratory, SEFC, NMFS, 7-9:28
 Charter boat fishermen, 1:13, 16-17
 Charter boat fishery, Texas
 landings since 1975, 1:11
 Charter boat harvest, species, 1:15-16
 Charter boat industry, Texas, 1:11-13
 Charter boats, Texas
 classification, 1:12
 harvest calculations, 1:13
 headboat surveys, 1:12
 management strategy, 1:14
 party boat surveys, 1:12
 recreational fish catch, 1979, 1:13-14
 "Chemical composition and frozen storage stability of weakfish, *Cynoscion regalis*," by Melvin E. Waters, 7-9:27
 Chinook salmon, *Oncorhynchus tshawytscha*, 2:9, 10-12:17
Chthamalus fragilis, barnacle, 3:5
 Chub mackerel, *Scomber japonicus*, 4-6:45
Citrobacter freundii, 4-6:37
 Clawson, Harry Q. M.--see Brown et al.
Clostridium botulinum, 2:1-3
 outbreaks, 2:1
 Type E
 D values, 2:5, 6
 distribution in nature, 2:1, 2
 in fish-related botulism, 2:1
 phantom TDT curves, 2:5
 quantitative incidence, 2:2
 survivor curves, 2:4
 Z value, 2:4, 5
Clostridium perfringens, 4-6:35, 38, 40
Clostridium sporogenes, 2:3
Clupea harengus, Atlantic herring, 10-12:18
Clupea sprattus, sprat, 10-12:19
 Cobia, *Rachycentron canadum*, 1:11
 Coho salmon, *Oncorhynchus kisutch*, 10-12:17
 Coleman, Essie M.--see Dragovich and Coleman
 Commission for the Conservation of Antarctic Marine Living Resources, 10-12:23
 "Composition, nutritive value, and sensory attributes of flesh fortified with texturized soy proteins," by Wilmon W. Meinke, Gunnar Finne, Ranzell Nickelson, and Roy Martin, 7-9:34
 Computer, net tapering--see Trawlnet section taper
 Consiglieri, Lewis--see Loughlin et al.
 Corps of Engineers, U.S. Army, 2:9
 Coryneforms, 4-6:35
Coryphaena hippurus, dolphin, 4-6:27
Coryphaena hippurus, dolphin or mahi-mahi, 4-6:43
Coryphaena sp., dolphin, 1:16
 Crabs, *Cancer irroratus* and xanthids, 3:5
Crassostrea gigas, Pacific oyster, 3:15
Crassostrea virginica, American oyster, 3:1
Crepidula fornicata, 3:5
Crepidula plana, 3:5
 Croaker, 7-9:27
Cynoscion nebulosus, spotted seatrout, 1:11
Cynoscion notus, silver seatrout, 1:15
Cynoscion regalis, weakfish, 7-9:27

D-E

- D value, 2:4, 5
 Dall's porpoise, *Phocoenoides dalli*, 7-9:45

- DeLong, Robert L.--see Loughlin et al.
Diadumene leucolea, bay anemone, 3:5
 Dinoflagellate, *Gymnodinium splendens*, 10-12:11
 Dolphin or mahi-mahi, *Coryphaena hippurus*, 1:16; 4-6:27, 43
 Doullman, David J., and Andrew Wright, "Recent developments in Papua New Guinea's tuna fishery," 10-12:47
 Doyle, Willard H.--see Martin et al.
 Dragovich, Alexander, and Essie M. Coleman, "Participation of U.S. trawlers in the offshore shrimp fisheries of French Guiana, Surinam, and Guyana, 1978-79," 4-6:1
 "(An) economic appraisal of sail-assisted commercial fishing vessels in Hawaii," by Karl C. Samples, 7-9:50
 "Economic potential for utilizing minced fish in cooked sausage products," by Richard J. Agnello, 7-9:21
 Ecosystem--see Large Marine, LME
 El Nino, off Southern California
 fish catch, recreational
 harvest effects, 1983-84, 4-6:34
 species, 4-6:32-33
 fish movements, 4-6:27
 sea surface temperatures, 4-6:27-30
 Enforcement Management Information System (EMIS), marine mammal catch data, 7-9:48
Engraulis mordax, northern (Pacific) anchovy, 10-12:4, 11
Enterobacter aerogenes, 4-6:35-37, 40
Enterobacteriaceae, 4-6:35, 38
Escherichia coli, 4-6:35
 "(An) estimate of harvest by the Texas charter boat fishery," by Lawrence W. McEachron and Gary C. Matlock, 1:11
Eumetopias jubatus, northern sea lion, 7-9:45
Eupleura caudata, oyster drill, 3:5
Euthynnus pelamis, skipjack tuna, 4-6:27
 "Experimental squid jigging off the Washington coast," by Royer W. Mercer and Michele Bucy, 7-9:56

F

- Fatty acids--also see Herrings, coastal, 4-6:45-48
 "Fatty acids and lipid classes of three underutilized species and changes due to canning," by Malcolm B. Hale and Thomas Brown, 4-6:45
 Finescale triggerfish, *Ballistes polylepis*, 4-6:27
 Finne, Gunnar--see Meinke et al. and Ward et al.
 Fish
 minced, 7-9:21
 in cooked sausages, 7-9:21, 26
 production costs, 7-9:22
 recruitment studies, LME, 10-12:1
 Fish aggregating devices (FAD), 10-12:50
 Fish poisoning, scombrotoxin, 4-6:35, 38
 Fish sticks, with TSP, 7-9:34
 amino acid composition, 7-9:35, 36
 flesh-TSP ratio, 7-9:37
 preparation, 7-9:34, 35
 protein efficiency ratios (PER), 7-9:35-36
 proximate composition, 7-9:35, 36
 sensory evaluations, 7-9:36
 Fishery Management Council, 1:2; 10-12:2
 Fishery Management Zone (FMZ), U.S., 7-9:21; 10-12:1
 Fishery products
 "Comparative Edibility Factors", 7-9:6
 edibility characteristics, 7-9:12-19
 edibility profiles, 7-9:15
 grading program, 7-9:6
 identification system, 7-9:6
 nomenclature, system for changing, 7-9:9-11
 base terms, 12, 7-9:11
 factor list, 7-9:10
 future developments, 7-9:19
 identification plan, prototype, 7-9:12
 standardized definition list, 7-9:11
 nomenclature scheme, 7-9:19
 potential expansion area, 7-9:1
 versatility, 7-9:2
 Fishing vessels, commercial, 7-9:50
 diesel-powered, Hawaii, 7-9:53, 55
 sail-assisted, Hawaii
 cost-effectiveness, 7-9:50
 investment analyses, 7-9:52-55
 new construction, 7-9:51
 sailing, 7-9:51
 Flagg, Thomas J.--see Newcomb and Flagg
Flavobacterium, 4-6:35
 Founders, I.I, 5; 10-12:18
 Flying squid, *Ommastrephes bartramii*, 7-9:56
 Food and Agriculture Organization, U.N., 7-9:17
 Food and Drug Administration, U.S., 4-6:42; 7-9:1, 4, 17
 Food, Drug, and Cosmetic Act, 7-9:1, 4, 6
 Foreign fishing vessels, N.E. Pacific, 7-9:47
 gear used, 7-9:48
 marine mammals caught, 1978-81, 7-9:45-49
 Frank, Hilmer A., Derrick H. Yoshinaga, and I-Pai Wu, "Nomograph for estimating histamine formation in skipjack tuna at elevated temperatures," 4-6:40

G

- Gadus macrocephalus*, Pacific cod, 10-12:12
Gadus morhua, Atlantic cod, 7-9:21, 34; 10-12:4
 Georgianna, Daniel, and Richard Ibara, "Groundfish processing in Massachusetts during the 1970's," 1:1
Gonyaulax polyedra, 10-12:11
 Green Jack, *Caranx caballus*, 4-6:27
 Groundfish exports, 1:6, 9
 Groundfish Imports, 1:4, 6, 9
 Groundfish industry, Mass.
 processing, 1:1
 fishery management data, 1:1
 plants, 1:6
 sales, 1:1
 statistical description, 1:2
 total employment, 1:6, 7, 9
 value, 1:1
 landings, 1964-79, 1:3-4, 8
 revitalization, 1:7
 "Groundfish processing in Massachusetts during the 1970's," by Daniel Georgianna and Richard Ibara, 1:1
 Groundfish products, 1:1
 Grouper (Serranidae), 1:16
 Guianas-Brazil shrimp grounds, 4-6:1
 Gulf shrimp, *Penaeus* spp., 10-12:4
Gymnodinium splendens, dinoflagellate, 10-12:11

H

- Haddock, *Melanogrammus aeglefinus*, 1:1, 5, 7; 10-12:4
Hafnia alvei, 4-6:35, 38
 Hale, Malcolm B., and Thomas Brown, "Fatty acids and lipid classes of three underutilized species and changes due to canning," 4-6:45
 Harbor seal, *Phoca vitulina*, 7-9:45
 Hard clam, *Mercenaria mercenaria*
 mariculture, South Carolina, 4-6:10
 direct production costs, 4-6:12
 operational lessons, 4-6:14
 nursery capacity, 4-6:15
 raceway type, 4-6:14
 seed clams, 4-6:10-14
 Herring, coastal, 4-6:45
 fatty acids
 canning medium, effect of, 4-6:47
 eicosapentaenoic acid, 4-6:45
 highly unsaturated (HUFA), 4-6:45-48
 polyunsaturated (PUFA), 4-6:45-48
 marketability, 4-6:45
 potential, 4-6:45
 proximate composition, 4-6:45
 utilization, 4-6:45
 yield, Gulf of Mexico, 4-6:45
Hippoglossoides sp., flounders, 10-12:18
 Histamine, 4-6:35, 40
 defect levels in tuna, 4-6:42
 distribution in decomposed fish, 4-6:43
 formation, 4-6:40
 equation describing, 4-6:41, 42
 incubation time-temperature, 4-6:41
 microbial decarboxylation of free histidine, 4-6:40
 hazard levels in tuna, 4-6:42
 index of microbial decomposition in tuna, 4-6:40
 nomograph to determine, 4-6:40-44
 organisms responsible, 4-6:40
 production, 4-6:37
 Histidine, 4-6:35, 40
 histidine decarboxylase, 4-6:35
 Honolulu Laboratory, SHFC, NMFS, 10-12:12
 Hopson, Debra J.--see Ward et al.

I-J

- Ibara, Richard--see Georgianna and Ibara
 Ichthyoplankton--see Large Marine Ecosystems
 "Ichthyoplankton and fish recruitment studies in large marine ecosystems," by Kenneth Sherman, Reuben Lasker, William Richards, and Arthur W. Kendall, Jr., 10-12:1
 "Incidental catch of marine mammals by foreign fishing vessels, 1978-81," by Thomas R. Loughlin, Lewis Consiglieri, Robert L. DeLong, and Ann T. Actor, 7-9:44
 International Commission for North Atlantic Fisheries (ICNAF), 10-12:23
 "Isolation of histamine-producing bacteria from frozen tuna," by Steve L. Taylor and Marci W. Speckhard, 4-6:35
 Istiophoridae (billfish), 1:16
 Jellyfish, *Velella velella*, 7-9:57

K

- Katsuwonus pelamis, skipjack tuna, 4-6:36, 40
 Kendall, Arthur W., Jr.--see Sherman et al.
 Killer whale, *Orcinus orca*, 7-9:48

- King mackerel, 1:15
Klebsiella pneumoniae, 4-6:35-38, 40

L

- Large Marine Ecosystems (LME), 10-12:1
 CalCOFI studies, 10-12:4, 7
 California Current, 10-12:3
 Eastern Bering Sea, 10-12:3
 Gulf of Alaska, 10-12:3
 Gulf of Mexico, 10-12:3
 Northeast Continental Shelf, 10-12:3
 Northeast Fisheries Center, NMFS
 density-dependent recruitment studies, 10-12:22
 ecosystem linkages, 10-12:19
 larval production, 10-12:21
 Narragansett Laboratory, 10-12:22
 Northeast Continental Shelf LME, 10-12:3
 pollution studies, 10-12:22
 primary production, studies, 10-12:20
 sampling strategy, 10-12:19
 spawning stock estimates, 10-12:21
 stressed N.E. shelf ecosystems, 10-12:18
 Northwest and Alaska Fisheries Center, NMFS
 areas of interest, 10-12:12
 Eastern Bering Sea LME, 10-12:12, 13
 egg-larvae guide, 10-12:12
 Gulf of Alaska LME, 10-12:12, 15
 ichthyoplankton survey locations, 10-12:17
 Pacific salmon studies, 10-12:16
 pollution stress, 10-12:17
 Washington-Oregon Coast LME, 10-12:12, 15
 Southeast Fisheries Center, NMFS
 bluefin tuna assessments, 10-12:6
 Gulf of Mexico LME, 10-12:3
 ichthyoplankton identification, 10-12:5
 ichthyoplankton surveys, Gulf, 10-12:4
 pollution stress, 10-12:7
 Southeast Area Monitoring Assessment and Prediction (SEMAP), 10-12:6
 Southwest Fisheries Center, NMFS
 CalCOFI population assessments, 10-12:11
 CalCOFI studies, 10-12:7
 California Current LME, 10-12:7
 Honolulu Laboratory studies, 10-12:12
 larval fish identification, 10-12:7
 physiological ecology studies, 10-12:7
 pioneering studies, 10-12:7
 pollution stress, 10-12:12
 sardine, anchovy abundance, 10-12:9
 Tiburon Laboratory studies, 10-12:12
 Washington-Oregon Coast, 10-12:3
 fisheries studies, 10-12:3
 ichthyoplankton surveys, 10-12:3
 management, 10-12:3, 23
 environmental studies, 10-12:23
 population surveys, 10-12:23
 resource assessment program, 10-12:23
 target species recruitment studies, 10-12:3
 trawl surveys, 10-12:4
 Lasker, Reuben--see Sherman et al.
Leiostomus xanthurus, spot, 7-9:31, 10-12:4
 Licciardello, Joseph J., "Botulism and heat-processed seafoods," 2:1
Limanda ferruginea, yellowtail flounder, 10-12:18, 21
 Little tunny, *Euthynnus alletteratus*, 1:15
 Little White Salmon National Fish Hatchery, 2:9
Lopholatilus chamaeleonticeps, tilefish, 4-6:16
 Loughlin, Thomas R., Lewis Consiglieri, Robert L. DeLong, and Ann T. Actor, "Incidental catch of marine mammals by foreign fishing vessels, 1978-81," 7-9:44
 Low, Jr., R. A., G. F. Ulrich, and F. Blum, "Tilefish off South Carolina and Georgia," 4-6:16
Lutjanus campechanus, red snapper, 1:11

M

- MacKenzie, Clyde L., Jr., "To increase oyster production in the northeastern United States," 3:1
 Mackerel, *Scomberomorus* sp., 1:11
 Magnuson Fishery Conservation and Management Act of 1975 (MCFMA), 10-12:23
 Magnuson Fishery Conservation and Management Act of 1976, 7-9:21
 Mani-mani or dolphin, *Coryphaena hippurus*, 4-6:43
 Manzi, John W.--see Brown et al.
 Marine Mammal Protection Act of 1972 (MMPA), 7-9:44
 Marine mammals, N.E. north Pacific
 harvest moratorium, 7-9:44
 incidental foreign catch, 7-9:44
 catch location, 7-9:46
 catch reporting, 7-9:44
 estimating annual take, 7-9:49
 future monitoring, 7-9:49
 General Permt system, 7-9:44
 mortalities, 7-9:45
 observer data, 1978-81, 7-9:45
 Marine Resources Monitoring Assessment and Prediction (MARMAP), 10-12:1-3
 Martin, David K., and Conrad W. Recksiek, "(A)

- microcomputer program for the calculation of a trawl-net section taper," 10-12:42
 Martin, Roy E., Willard H. Doyle, and James R. Brooker, "Toward an improved seafood nomenclature system," 7-9:1
 --see Meinke et al.

- Matlock, Gary C.--see McEachron and Matlock
 McEachron, Lawrence W., and Gary C. Matlock, "An estimate of harvest by the Texas charter boat fishery," 1:11
 Meinke, Wilmon W., Gunnar Finne, Ranzell Nickelson, and Roy Martin, "Composition, nutritive value, and sensory attributes of fish sticks prepared from minced fish flesh fortified with texturized soy proteins," 7-9:34
Melanogrammus aeglefinus, haddock, 10-12:4
Mercenaria mercenaria, hard clam, 4-6:10
 Mercer, Roger W., and Michele Bucy, "Experimental squid jigging off the Washington coast," 7-9:56
Merluccius bilinearis, silver hake, 7-9:21; 10-12:4, 20
Merluccius productus, Pacific hake (whiting), 10-12:4
 Micrococcus, 4-6:35
 "(A) microcomputer program for the calculation of a trawl-net section taper," by David K. Martin and Conrad W. Recksiek, 10-12:42
Microgadus proximus, Pacific tomcod, 10-12:12
Microgogonias undulatus, Atlantic croaker, 10-12:4
 Middling thread herring, *Opisthonema mediastre*, 4-6:27
 Minced fish, 7-9:28
 texturized soy protein (TSP), with, 7-9:34
 composition, 7-9:34-35
 nutritive values, 7-9:34-35
 washed, unwashed, 7-9:28
Mirounga angustirostris, northern elephant seal, 7-9:45
 Morone saxatilis, striped bass, 7-9:1, 10-12:4
 "Moving out the learning curve: An analysis of hard clam, *Mercenaria mercenaria*, nursery operations in South Carolina," by John W. Brown, John W. Manzi, Harry Q. M. Clawson, and Fred S. Stevens, 4-6:10

N-O

- Nail squid, *Onychoteuthis borealijaponicus*, 7-9:56
 Names of fishes, 7-9:1
 National Marine Fisheries Service, 7-9:10, 21; 10-12:1
Naucrates ductor, pilotfish, 4-6:27
 Net tapering--see Trawl-net
 New England Fishery Management Council, 1:2
 Newcomb, Timothy W., and Thomas J. Flagg, "Some effects of Mt. St. Helens volcanic ash on juvenile salmon smolts," 2:8
 Nickelson, Ranzell--see Meinke et al., Ward et al.
 Nomenclature system, seafood, 7-9:1, 6
 "Nomograph for estimating histamine formation in skipjack tuna at elevated temperatures," by Hilmer A. Frank, Derrick H. Yoshinaga, and I-Pai Wu, 4-6:40
 Northeast Fisheries Center, NMFS, 10-12:2
 Northern elephant seal, *Mirounga angustirostris*, 7-9:45
 Northern fur seal, *Callorhinus ursinus*, 7-9:45, 57
 Northern (Pacific) anchovy, *Engraulis mordax*, 10-12:4
 Northern sea lion, *Eumetopias jubatus*, 7-9:45-47
 Northwest and Alaska Fisheries Center, NMFS, 7-9:48, 56; 10-12:2
 Ocean perch, 1:1, 5, 9
Odobenus rosmarus, walrus, 7-9:45
Ommastrephes bartramii, flying squid, 7-9:56
Oncorhynchus kisutch, Coho salmon, 10-12:17
Oncorhynchus nerka, sockeye salmon, 2:9
Oncorhynchus spp., Pacific salmon, 2:9, 10-12:4
Oncorhynchus tshawytscha, chinook salmon, 2:9, 10-12:17
Onychoteuthis borealijaponicus, nail squid, 7-9:56
Opisthonema mediastre, middling thread herring, 4-6:27
Opisthonema oglinum, thread herring, 4-6:45
Orcinus orca, killer whale, 7-9:48
Ostracion diaphanum, spiny boxfish, 4-6:27
 Outer Continental Shelf Environmental Assessment Program (OCSEAP), 10-12:15
 Oyster drills, 3:5
 Oyster, Pacific, 3:15
 Oyster, see American oyster, 3:1

P-Q-R

- Pacific barracuda, *Sphyrna argentea*, 4-6:27
 Pacific bonito, *Sarda chiliensis*, 4-6:31
 Pacific cod, *Gadus macrocephalus*, 10-12:12
 Pacific hake (whiting), *Merluccius productus*, 10-12:4, 16
 Pacific king crab, *Paralithodes* spp., 10-12:4, 14
 Pacific oyster, *Crassostrea gigas*, 3:15
 Pacific salmon, *Oncorhynchus* spp., 2:9, 10-12:4
 Pacific sardine, *Sardinops sagax*, 10-12:4

- Pacific tomcod, *Microgadus proximus*, 10-12:12
 Papua New Guinea, tuna fishery, 10-12:47
 Paralichthys spp., flounders, 10-12:13
 Paraliithodes spp., Pacific king crab, 10-12:4
 "Participation of U.S. trawlers in the offshore shrimp fisheries of French Guiana, Surinam, and Guyana, 1978-79," by Alexander Dragovich and Essie M. Coleman, 4-6:1
 Penaeus brasiliensis, pink-spotted shrimp, 4-6:1
 Penaeus notialis, pink shrimp, 4-6:1
 Penaeus schmitti, 4-6:1
 Penaeus spp., Gulf shrimp, 10-12:4
 Penaeus subtilis, brown shrimp, 4-6:1
 Phoca fasciata, ribbon seal, 7-9:45
 Phoca vitulina, harbor seal, 7-9:45
 Phocoenoides dalli, Dall's porpoise, 7-9:45
 Pilotfish, Naucrates ductor, 4-6:27
 Pink shrimp, Penaeus notialis, 4-6:1
 Pink-spotted shrimp, Penaeus brasiliensis, 4-6:1
 Plankton Sorting and Identification Center, Poland, 10-12:5, 7, 19
 Pollachius virens, pollock, 10-12:18
 Pollock, 1:1, 5, 8
 Pollock, Pollachius virens, 10-12:18
 Pomatomus saltatrix, bluefish, 1:16, 10-12:19
 Prionotus spp., searobin, 10-12:19
 Processes and Resources of the Bering Sea (PROBES), 10-12:13
 "Processing technologies and their effects on microbiological properties, thermal processing efficiency, and yield of blue crab," by Donn R. Ward, Ranzell Nickelson II, Gunnar Finne, and Debra J. Hopson, 7-9:38
 Proteus mirabilis, 4-6:40
 Proteus morganii, 4-6:35-38
 Proximate composition
 chub mackerel, 4-6:46
 fish sticks, 7-9:34
 Spanish sardine, 4-6:46
 thread herring, 4-6:46
 weakfish, 7-9:28
 Pseudomonas, 4-6:35
 Pseudopleuronectes sp., flounders, 10-12:13
 Rachycentron canadum, cobia, 1:11
 "Recent developments in Papua New Guinea's tuna fishery," by David J. Doullman and Andrew Wright, 10-12:47
 Recksiek, Conrad W., "Shaping and assembling webbing," 10-12:26
 --see Martin and Recksiek
 Recruitment studies (see Large Marine Ecosystem)
 Red drum, Sciaenops ocellatus, 1:11
 Red hake, Urophycis chuss, 7-9:21, 10-12:20
 Red snapper, Lutjanus campechanus, 1:11
 Redfish, Sebastes sp., 10-12:19
 Ribbon seal, Phoca fasciata, 7-9:45
 Richards, William--see Sherman et al.
 Rockfish, Sebastes spp., 10-12:13
- S**
- Sablefish, Anoplopoma fimbria, 10-12:16
 Sail-assisted fishing vessels
 economic appraisal of, 7-9:50
 see Fishing vessels, commercial
 Salmo gairdneri, steelhead trout, 2:9
 Salmon smolts, 2:9
 Samples, Karl C., "(An) economic appraisal of sail-assisted commercial fishing vessels in Hawaii," 7-9:50
 Sand lance, Ammodytes spp., 10-12:19
 Sand seatrout, 1:15
 Sandy Hook Laboratory, NEFC, 10-12:19
 Sarda chiliensis, Pacific bonito, 4-6:31
 Sarda sarda, Atlantic bonito, 1:16
 Sardinella aurita, Spanish sardine, 4-6:45
 Sardinops sagax, Pacific sardine, 10-12:4
 Sausage products, cooked, 7-9:21
 Sausage products with fish
 costs, 7-9:21-22
 economic impacts, 7-9:21, 26
 market, 7-9:22
 potential, 7-9:21-22
 nutritional attributes, 7-9:23
 Sciaenops ocellatus, red drum, 1:11
 Scomber japonicus, chub mackerel, 4-6:45
 Scomber scombrus, Atlantic mackerel, 1:11; 10-12:4
 Scuba gear, in oyster surveys, 3:1
 Seafood nomenclature system, 7-9:1
 Searobin, Prionotus spp., 10-12:19
 Sebastes sp., redfish, 10-12:19
 Sebastes spp., rockfish, 10-12:13, 15-16
 Seriola dumerili, amberjack, 1:15
 Seriola lalandei, yellowtail, 4-6:31
 Serranidae (grouper), 1:16
 "Shaping and assembling webbing," by Conrad W. Recksiek, 10-12:26
 Sherman, Kenneth, Reuben Lasker, William Richards, and Arthur W. Kendall, Jr., "Ichthyoplankton and fish recruitment studies in large marine ecosystems," 10-12:1
 Shortbill spearfish, Tetrapturus angustirostris, 4-6:27
 Shrimp fisheries
- Guianas-Brazil area, 1978-79, 4-6:1-2
 catch, 4-6:7-8
 CPUE, 4-6:3
 fishing effort, 4-6:4-6
 regulations, 4-6:2
 trends, 4-6:9-10
 U.S. vessel landings, 4-6:3
 Shrimp fleet
 Guianas-Brazil area, 4-6:2
 U.S. South Atlantic, 7-9:27
 Silver hake, Merluccius bilinearis, 7-9:21, 10-12:4
 Silver seatrout, Cynoscion nothus, 1:15
 Skipjack tuna, Euthynnus pelamis, 4-6:27, 40
 histamine producing bacteria, 4-6:37
 landings, 1980-81, 10-12:47
 Papua New Guinea DFZ, in, 10-12:47
 sustainable yield, 10-12:47
 Skipjack Tuna Assessment Programme, SPC, 10-12:47
 Slipper shells, 3:5
 Sockeye salmon, Oncorhynchus nerka, 2:9
 "Some effects of Mt. St. Helens volcanic ash on juvenile salmon smolts," by Timothy W. Newcomb and Thomas J. Flagg, 2:8
 South Pacific Commission (SPC), 10-12:47
 Southeast Fisheries Center, NMFS, 10-12:2
 Charleston Laboratory, 4-6:46
 Panama City Laboratory, 4-6:45
 Southwest Fisheries Center, NMFS, 10-12:2
 Honolulu Laboratory, 10-12:12
 Tiburon Laboratory, 10-12:12
 Spanish mackerel, 1:15
 Spanish sardine, Sardinella aurita, 4-6:45
 Speckhard, Marci W.--see Taylor and Speckhard
 Sphyaena argentea, Pacific barracuda, 4-6:27
 Spiny boxfish or trunkfish, Ostracion diaphanum, 4-6:27
 Spot, Leiostomus xanthurus, 7-9:27, 31; 10-12:4
 Spotted seatrout, Cynoscion nebulosus, 1:11, 15
 Sprat, Clupea sprattus, 10-12:19
 Spratelloides gracilis, sprat, 10-12:50
 Squids, off Washington
 biological data, 7-9:59, 60, 61
 flying squid, 7-9:56
 harvesting, 7-9:60
 jigging experiments, 7-9:57-59
 nail squid, 7-9:56
 sexual maturity, 7-9:61
 Squire, James L., Jr., "Warm water and southern California recreational fishing: A brief review and prospects for 1983," 4-6:27
 --see "Weight frequencies for striped marlin, Tetrapturus audax, caught off southern California," 7-9:63
 Staphylococcus aureus, 7-9:39, 42
 Starfish, Asterias forbesi, 3:5
 Steelhead trout, Salmo gairdneri, 2:9
 Stevens, Fred S.--see Brown et al.
 Stolephorus devisi, anchovy, 10-12:50
 Stolephorus heterolobus, anchovy, 10-12:50
 Striped bass, Morone saxatilis, 7-9:1; 10-12:4, 12
 Striped marlin, Tetrapturus audax, 4-6:31, 7-9:63
 Baja California, off
 catch, 7-9:63
 weight, mean, 7-9:63
 Southern California, off
 harvest, 7-9:63
 sex ratios, 7-9:64
 weight, data, 7-9:63-65, 67
- T**
- Taylor, Steve L., and Marci W. Speckhard, "Isolation of histamine-producing bacteria from frozen tuna," 4-6:35
 Tetrapturus albidus, white marlin, 1:16
 Tetrapturus angustirostris, shortbill spearfish, 4-6:27
 Tetrapturus audax, striped marlin, 4-6:31, 7-9:63
 Texas A&M University, 7-9:34
 Texas charter boat fishery, 1:11
 Theragra chalcogramma, walleye pollock, 7-9:21, 34; 10-12:4
 Thread herring, Episthonema oglinum, 4-6:45
 Thunnus alalunga, albacore, 4-6:31, 7-9:57
 Thunnus albacares, yellowfin tuna, 1:16; 4-6:27; 10-12:55
 Thunnus obesus, bigeye tuna, 10-12:55
 Thunnus thynnus, bluefin tuna, 4-6:27, 10-12:4
 Tiburon Laboratory, SWFC, 10-12:12
 Tilefish, Lopholatilus chamaeleonticeps, 4-6:16
 historic data, 4-6:16
 off South Carolina, Georgia, 4-6:16
 average size, 4-6:23
 bottom temperatures, 4-6:24
 CPUE, 4-6:17, 18
 fishery, 4-6:25
 habitat, 4-6:22
 relative abundance, 4-6:20-21
 seasonal production, 4-6:22
 test fishing, 4-6:17
 "Tilefish off South Carolina and Georgia," by R. A. Low, Jr., G. F. Ulrich, and F. Blum, 4-6:16
 "To increase oyster production in the northeastern United States," by Clyde L. Mackenzie, 3:1
 Total Allowable Level of Foreign Fishing (TALFF), 7-9:21-22, 25
 "Toward an improved seafood nomenclature system," by Roy E. Martin, Willard H. Doyle, and James R. Brooker, 7-9:1
 Trawlers, U.S.--shrimp, 4-6:1
 Trawlnet (see Webbing)
 Trawlnet section taper
 BASIC language code, 10-12:43
 computer program, 10-12:42, 44
 hanging ratio calculations, 10-12:46
 program logic flowchart, 10-12:44
 subroutines, 10-12:45, 46
 symmetry test, 10-12:43
 twine weight parameters, 10-12:46
 webbing piece dimensions, 10-12:42
 wing, 10-12:42
 Tuna fishery, Papua New Guinea, 10-12:47
 distant-water fishery, 10-12:52, 54-55
 future, 10-12:58-59
 management, 10-12:57-58
 domestic fishery, 10-12:47-50
 catch, 10-12:49-50, 54
 CPUE, 10-12:49
 economic considerations, 10-12:50, 51
 exports, 10-12:41
 FAD's, 10-12:50
 resources, 10-12:47-48
 Tuna, skipjack--see skipjack tuna
- U-V**
- Ulrich, G. F.--see Low et al.
 Urophycis chuss, red hake, 7-9:21, 10-12:20
 Urophycis spp., 10-12:20
 Urosalpinx cinerea, oyster drill, 3:5
 Velella velella, jellyfish, 10-12:57
 Vibrio, 4-6:35
 Vibrio alginolyticus, 4-6:40
 Vibrio cholerae, 7-9:39, 42
 Vibrio parahaemolyticus, 7-9:39, 42
 Volcanic ash
 effect on salmon smolts, 2:8
 hazard concentration levels, 2:11
 hazards to juvenile salmon, 2:10-12
 particulate size, 2:9
- W**
- Walleye pollock, Theragra chalcogramma, 7-9:21, 34; 10-12:4, 12-13
 Walrus, Odobenus rosmarus, 7-9:45
 Ward, Donn R., Ranzell Nickelson II, Gunnar Finne, and Debra J. Hopson, "Processing technologies and their effects on microbiological properties, thermal processing efficiency, and yield of blue crab," 7-9:38
 "Warm water and southern California recreational fishing: A brief review and prospects for 1983," by James L. Squire, Jr., 4-6:27
 Waters, Melvin E., "Chemical composition and frozen storage stability of weakfish, Cynoscion regalis," 7-9:27
 Weakfish, Cynoscion regalis
 chemical composition, 7-9:27
 frozen storage stability, 7-9:27
 minced food products, use in, 7-9:28
 processing yields, 7-9:29
 product evaluation, 7-9:28
 recreational catch, 7-9:27
 sensory evaluation, 7-9:28, 30
 Webbing (also see Trawlnet)
 bellies, 10-12:33
 body cuts, 10-12:26, 28
 computer calculation, 10-12:26, 42
 cutting square mesh sections, 10-12:41
 cutting trawlnet sections, 10-12:32
 double tapers, 10-12:36
 extensions, 10-12:33
 job cuts, 10-12:26, 28, 30
 shaping and assembling, 10-12:26
 tapering, 10-12:26-28
 trapezoidal net sections, 10-12:35
 trawl wings, 10-12:34
 wing assembly, 10-12:38
 "Weight frequencies for striped marlin, Tetrapturus audax, caught off southern California," by James L. Squire, Jr., 7-9:63
 White marlin, Tetrapturus albidus, 1:16
 White seabass, Atractoscion nobilis, 4-6:27
 White shrimp, Penaeus schmitti, 4-6:1
 Wright, Andrew--see Doullman and Wright
 Wu, I-Pai--see Frank et al.
- X-Y-Z**
- Xanthids, 3:5
 Yellowfin tuna, Thunnus albacares, 1:16; 4-6:27; 10-12:55
 Yellowtail, Seriola lalandei, 4-6:31
 Yellowtail flounder, Limanda ferruginea, 10-12:21
 Yoshinaga, Derrick H.--see Frank et al.
 Z value, 2:4-5